

Onset of Bose-Einstein condensation in frame in microcanonical ensemble

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ABSTRACT

In frame of microcanonical ensemble we consider gases of two kinds of particles, namely distinguishable and bose particles trapped in 3D isotropic harmonic potential. Dependence of entropies on energy for several finite number of particles is studied. For them, the mean value of the ground state occupation is calculated. Although the applied technique is limited to very small particle numbers precursors of Bose-Einstein condensation are observed.